

## CLAIMS

We Claim:

1. An automatic flushing actuator system for a toilet having a tank and a bowl comprising:

a sensor that detects the presence of an occurrence;

a receiver coupled to said sensor; said receiver being disposed in a housing having a base and a cover, said cover having a rotatable lever mounted thereon;

a gear mechanism connected to said receiver, said gear mechanism having a cam that engages an actuator rod which is in contact with said lever; and

a clamp mounting said housing on a component in the toilet tank.

2. The automatic flushing actuator of claim 1, wherein said clamp is removably mounted to said housing.

3. The automatic flushing actuator of claim 1, wherein said clamp is permanently mounted to said housing.

4. The automatic flushing actuator of claim 1, wherein said clamp can be changed from a removably mounted configuration on said housing to a permanently mounted configuration by rotating the clamp about 180 degrees.

5. The automatic flushing actuator of claim 1 further comprising an insert configured for placement inside said clamp.

6. The automatic flushing actuator of claim 1, wherein said component comprises an overflow pipe and said clamp is affixed to said overflow pipe.

7. The automatic flushing actuator of claim 6, wherein said housing is affixed to said clamp after said flap is affixed to said overflow pipe.

8. The automatic flushing actuator of claim 1 further comprising a turret coupled to an upper portion of said cover.

9. The automatic flushing actuator of claim 8 further comprising a lever assembly having an inner surface coupled to said lever on said turret.

10. The automatic flushing actuator of claim 9 further comprising serrations on said turret.

11. The automatic flushing actuator of claim 10 further comprising serrations on said inner surface of said lever assembly, wherein said turret serrations engage said lever assembly serrations when said lever is rotated thereby establishing said lever assembly in a desired position.

12. The automatic flushing actuator of claim 1 wherein said receiver is wirelessly coupled to said sensor.

13. An actuator for an automatic flushing system for use with a toilet having a tank and a bowl comprising:

a housing comprising a base and a cover, said cover having an upper surface; and

a lever rotatably coupled to said cover upper surface.

14. The actuator of claim 13 further comprising guide rails coupled to a slidably receivable clamp of said housing.

15. The actuator of claim 14, wherein said slidably receivable clamp is removably mounted to said housing.

16. The actuator of claim 14, wherein said slidably receivable clamp can be changed from a removably mounted configuration on said housing to a permanently mounted configuration by rotating said slidably receivable clamp about 180 degrees.

17. A method for installing an automatic flushing actuator system for a toilet having a tank and a bowl comprising the steps of:

affixing a clamp to a stationary appendage within a tank;

attaching a housing of an actuator to said clamp within said tank;

rotating a lever on said actuator within said tank;

attaching said lever to a flap lid;

attaching said actuator to a power source; and

affixing a sensor to a surface outside of said tank.

18. The method of claim 17 wherein said stationary appendage comprises an overflow tube.

19. The method of claim 17 wherein attaching said housing further comprises:

placing said clamp around said appendage; and

tightening a fastener attached to said clamp to tighten said clamp around said appendage.

20. The method of claim 17 wherein attaching said lever to said flap lid further comprises connecting a first end of a chain to said lever and attaching a second end of said chain to said flap lid.

21. The method of claim 17 wherein rotating said lever further comprises:

loosening a first and second lever clamp caps;  
rotating said lever to align with said flap lid; and  
tightening said first and said second lever clamp caps.

22. The method of claim 17 wherein affixing said housing to said clamp further comprises sliding a channel on said housing onto a plate on said clamp.

23. The method of claim 17 further comprising attaching a first end of a cable to said sensor and a second end of said cable to said actuator.